ABSTRACT OF THE DISCLOSURE

The present invention relates to DNA molecules encoding mutants of vertebrate growth hormones which act as GH These mutants have growth-inhibitory or other GHantagonists. antagonizing ef**x**ects. The invention also describes methods of treating acromegaly, gigantism, cancer, diabetes, vascular eye diseases (diabetic retinopathy, retinopathy of prematurity, agerelated macular degeneration, retinopathy of sickle-cell anemia, etc.) as well as nephropathy and other diseases, by administering an effective amount of \a DNA molecule encoding and expressing a growth hormone antagonist. The invention also provides pharmaceutical formulations comprising DNA molecules encoding and expressing one or more growth hormone antagonists, and transgenic animals which express the antagonist.

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